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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* BRIAN S. MEDOWER  
and DAVID L. BLANKENBECKLER

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Appeal 2009-013463  
Application 10/056,927  
Technology Center 1700

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Before ADRIENE LEPIANE HANLON, JEFFREY T. SMITH, and  
LINDA M. GAUDETTE, *Administrative Patent Judges*.

SMITH, *Administrative Patent Judge*.

DECISION ON APPEAL<sup>1</sup>

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<sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

## STATEMENT OF THE CASE

The Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1-11, 13, and 15-18. An amendment was filed on August 12, 2008, which canceled claims 19-31. Although the rejection appealed from is a non-final rejection, we have jurisdiction under 35 U.S.C. §§ 6 and 134 since the claims on appeal have been twice presented and rejected. *See Ex parte Lemoine*, 46 USPQ2d 1420, 1423 (BPAI 1998).

### *The Invention*

Appellants' invention is directed to a method of manufacturing optical discs using mother stampers. Claim 1 is illustrative:

1. A method of making a first-surface optical disk, comprising:

providing a father stamper, wherein the father stamper comprises spiral protrusions on a first portion of a first surface and bumps on a second portion of the first surface, the spiral protrusions and bumps corresponding to original laser cuts;

coating the first surface of the father stamper with nickel;

separating the nickel from the first surface to produce a second stamper having groove recesses and pits on a first surface, wherein the groove recesses are mirror images of the spiral protrusions and the pits are mirror images of the bumps;

covering the first surface of the second stamper with a plastic material;

separating the plastic material from the second stamper, wherein the plastic material has lands corresponding to the groove recesses of the second stamper and bumps corresponding to the pits;

depositing a phase-change material directly over the lands and bumps, wherein the phase-change material is in a first

state upon deposition and in a second state after being written to, and wherein the change from the first state to the second state changes the optical phase of the phase-change material in the positive direction, the lands forming a writeable area of the first-surface disk and the bumps forming a read-only area of the first-surface disk; and

depositing a dielectric layer over the phase-change material to form the first-surface optical disk, the dielectric layer being deposited to have a thickness that enhances an optical phase difference between the first and second states of the phase-change material, the first-surface optical disk consisting of no further layers.

Claims 1-4, 6-11, 13, and 15-18 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combined teachings of Edwards, Berg, and Ichiro.

Claim 5 stands rejected under 35 U.S.C. § 103(a) as unpatentable over the combined teachings of Pan, Berg, Ichiro, and Dobbin.<sup>2</sup>

Appellants have not presented separate arguments for all of the rejected claims. Rather, Appellants' arguments are principally directed to independent claim 1. Any claim not separately argued will stand or fall with independent claim 1. See 37 C.F.R. § 41.37(c)(1)(vii) (2009).

## OPINION

The dispositive issue for the § 103 rejections on appeal is the following:

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<sup>2</sup> Pan (US 4,960,680, issued Oct. 2, 1990); Dobbin (US Re. 34,506, issued Jan. 11, 1994); Edwards (US 2001/0016301 A1, issued Aug. 23, 2001); Berg (US 2001/0036149 A1, issued Nov. 1, 2001); Ichiro (JP03-086943, issued Apr. 11, 1991).

Did the Examiner err in determining that the combination of Edwards, Berg, and Ichiro describes or suggests a method of making an optical disc comprising stamping the ROM and RAM portions onto a substrate and then covering the stamp substrate with a phase-change material required by the independent claim 1? We answer this question in the affirmative.

According to the Examiner, Edwards describes a method of manufacturing an optical disc that differs from the claimed invention in that “Edwards does not specifically disclose using the mother stamper (second stamper) to make a first surface optical disc of plastic material, deposited phase-change material and deposited dielectric layer over the phase change material and consisting of no further layers.” (Ans. 4). The Examiner cited Pan as teaching a write-once recordable optical element comprising a polycarbonate substrate; Berg as teaching read-only information can be provided by pits or bumps being recorded on optical media; and Ichiro as teaching coating an optical recording medium with a silicon oxynitride protective film having high mechanical strength. (Ans. 4-5). The Examiner concluded that it would have been obvious to deposit a phase-changing material on a molded polycarbonate replica disc and deposit a dielectric layer of silicon oxynitride on the phase change material based on the teachings of the cited prior art. (Ans. 5).

Appellants argue that Edwards and the remaining cited prior art does not describe a method of manufacturing an optical disc comprising stamping the ROM and RAM portions onto a substrate and then covering the stamped substrate with a phase-change material. (App. Br. 7).

The Examiner’s statement of the rejection and the response to this argument, Answer 8, are insufficient to address Appellants' argument. The

Examiner, in the statement of the rejection when discussing the various references, has cited multiple columns and/or pages of the various references. The Examiner has not identified specific portions of the cited references or provided an explanation supported by evidence that addresses Appellants' argument. "[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 418 (2007) (*quoting In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

For the foregoing reasons, the Examiner's § 103 rejections are reversed.

#### DECISION

The 35 U.S.C. § 103 rejections of claims 1-11, 13, and 15-18 are reversed.

#### REVERSED

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